

Amendment to the Claims:

1. (Currently Amended) A method of controlling an electronic device, comprising the steps of:

detecting brainwaves of a user;

in response to detecting theta waves from the user, at least one of
5 ~~reducing a volume of sound output by the electronic device, reducing a quality of~~
~~sound output by the electronic device,~~ reducing a size of an image output by the
electronic device[[,]] and reducing a quality of an image output by the electronic
device;

in response to detecting delta waves or a REM state, switching the
10 electronic device to one of off and a hibernation mode of reduced power consumption.

2-6. (Cancelled)

7. (Previously Presented) A computer readable medium which stores a computer program which controls a programmable device to carry out a method as claimed in claim 1.

8. (Currently Amended) An electronic device, comprising:
a receiver which receives, from a detector, a detection signal indicative
of a sleep state of a user; and

a control unit which:

5 via the receiver, receives the detection signal from the
detector,

determines whether, based on the received detection
signal, the user is asleep, probably asleep, or awake,

in response to determining that the user is probably
10 asleep, controls the electronic device to at least one of ~~reduce a volume~~
~~of sound output by the electronic device, reduce a quality of sound~~
~~output by the electronic device,~~ reduce a size of an image output by the

electronic device[[,]] and reduce a quality of an image output by the electronic device, and

15 in response to determining that the user is asleep, switches the electronic device to a reduced power consumption mode.

9. (Cancelled)

10. (Previously Presented) The electronic device as claimed in claim 8, it further including a motion detector.

11. (Currently Amended) The electronic device as claimed in claim 8, further including:

an output means which generates ~~at least one of an audio signal and a~~ display signal.

12-16. (Cancelled)

17. (Previously Presented) An electronic device including a processor programmed to perform the steps claimed in claim 1.

18. (Currently Amended) The electronic device as claimed in claim 8, further including:

5 a brainwave detector which measures brainwaves of the user and generates the detection signal based on the detected brainwaves and the control unit reduces ~~the sound volume or quality or the image size or quality~~ in response to a detection signal indicative of a first detected brainwave state and switches to the reduced power consumption mode in response to a detection signal indicative of a second brainwave state, the first brainwave state being different from the second brainwave state.

19. (Currently Amended) An electronic device comprising:
a brainwave detector which measures brainwaves of a user of the
electronic device and generates a detection signal based on the detected brainwaves;
a receiver for receiving the detection signal from the brainwave
5 detector, and
control unit which:
receives the detection signal from the receiver,
determines whether the user is probably asleep by
identifying from the detection signal a first brainwave pattern that is
10 indicative of at least one of relaxed with eyes closed, sleepy, already
sleeping, or in a sleep transition,
determines whether the user is asleep by identifying a
second brainwave pattern indicative of the user being in a deep sleep
or REM sleep,
15 in response to determining that the user is probably
asleep, controls the electronic device to at least one of ~~reduce a volume
of sound output by the electronic device, reduce a quality of sound
output by the electronic device,~~ reduce a size of an image output by the
electronic device[[,]] and reduce a quality of an image output by the
20 electronic device, and
switches the electronic device to a mode of reduced
power consumption in response to determining that the user is asleep.

20. (Previously Presented) The electronic device as claimed in
claim 19, further including:

a motion detector which outputs a second detection signal based on
detected motion; and,

5 wherein the control unit determines whether the user is probably asleep
based on the brainwave detection signal and the motion detection signal, and
determines whether the user is asleep based on both the brainwave detection signal
and the motion detection signal.

21. (Previously Presented) The electronic device as claimed in claim 19, wherein the control unit determines whether the user is probably asleep based on whether the brainwave detection signal is indicative of theta or alpha waves and determines whether the user is asleep based on the brainwave detection signal
5 being indicative of delta waves or REM sleep.

22. (Previously Presented) The electronic device as claimed in claim 8, further including a pressure sensor for generating the detection signal.

23. (Currently Amended) The method as claimed in claim 1, further including:

determining whether movement has been determined for a predetermined period of time;

5 in response to no movement being detected for the predetermined period of time, at least one of ~~reducing a volume of sound output by the electronic device, reducing a quality of sound output by the electronic device,~~ reducing a size of an image output by the electronic device; and reducing a quality of an image output by the electronic device.

24. (Currently Amended) The electronic device as claimed in claim 8, further including:

a brainwave detector which details and differentiates among theta waves, delta waves, and an REM sleep state; and

5 wherein the control unit controls the electronic device to:

in response to the detector detecting the theta waves, at least one of ~~reduce the volume of the sound output by the electronic device, reduce the quality of the sound output by the electronic device,~~ reduce the size of the image output by the electronic device[[,]] and
10 reduce the quality of the image output by the electronic device; and

in response to the detector detecting at least one of the delta waves and the REM sleep state, switching the electronic device to the reduced power consumption mode.

25. (Currently Amended) The electronic device as claimed in claim 19, wherein:

the brainwave detector detects theta waves, delta waves, and a REM sleep state; and

5 the control unit:

at least one of reduces ~~the volume of the sound output,~~
~~the sound quality,~~ the size of the image output, and the quality of the
image output in response to the brainwave detector detecting theta
waves; and

10 switches to the reduced power consumption mode in
response to the brainwave detector detecting the delta waves or the
REM sleep state.

26. (New) The method as claimed in claim 1, further
including detecting brainwaves of a plurality of users and wherein switching to one of
the off and hibernation modes is performed in response to detecting the delta waves
or the REM state of all of the users.